

point towards a surface...
ends are placed a distance...
embodiment, for example, a glass substrate...

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Jurrien [NL/NL]; Vestestraat 3B, NL-2312 CT Leiden (NL).

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(74) Agents: PLAGGENBORG, Menko, Bernard et al.;
Octrooibureau Los En Stijger B.V., Weteringschans 96,
NL-1017 XS Amsterdam (NL).

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(71) Applicant (for all designated States except US): TECHNISCHE UNIVERSITEIT DELFT [NL/NL]; Julianalaan 134, NL-2628 BL Delft (NL).

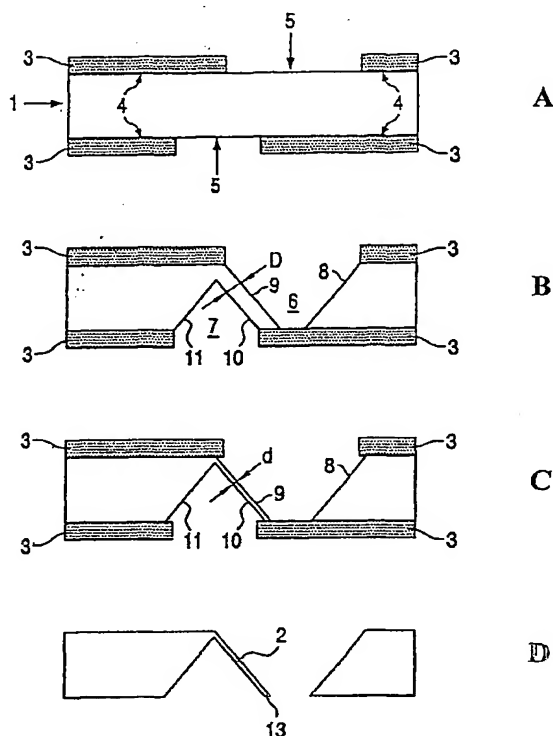
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(72) Inventor; and

(75) Inventor/Applicant (for US only): VENSTRA, Warner,

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(54) Title: A METHOD FOR MANUFACTURING A MEMBRANE IN A (111) SURFACE OF A (100) SILICIUM WAFER



(57) Abstract: The invention relates to a method for the fabrication of a membrane oriented in a (111) plane of a (100) silicon wafer. To this end the method comprises the following steps: applying a mask to both sides of the wafer, wherein portions of the sides are covered by the mask; and the at least partial removal by etching away silicon material from the portions of the two sides of the wafer that are not covered. This method is characterised in that the etching step substantially removes the silicon material forming recesses in the two surfaces of the wafer, such that the walls of the recesses are formed by (111) planes, and in that not covered portions at both sides of the wafer are aligned in relation to one another such that a (111) plane is formed and the distance d between said two planes is less than the thickness of the silicon wafer, so as to form a membrane in the (111) plane having a thickness d. Such a membrane has many application possibilities in the field of MEMS, for example by dividing the membrane into individual cantilevers.

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